ELSEVIER

Thin Solid Films 376 (2000) 275–276

thin solid films

www.elsevier.com/locate/tsf

Author Index of Volume 376

Abd. Majid, W.H., 225
Abe, K., 140
Andrade, E., 99
Arce, R.D., 267

Bai, M., 170
Bele, M., 5
Bente, K., 82
Berera, G.P., 9
Brehme, S., 47
Buitrago, R.H., 267
Byun, K.-M., 26

Cattani, M., 264
Chang, K.-M., 124
Chen, L., 115
Chen, L.-W., 124
Cheung, W.Y., 131
Choe, S., 164
Choi, S.W., 208
Chuang, R., 164

Desai, U.B., 16
Ding, C.X., 179

Ekstrom, B., 115
El-Korashy, A., 236
El-Zahed, H., 236
Era, M., 232
Estrada-López, W., 99

Fuhs, W., 47

Galdikas, A., 56
Gillen, G., 32
Gioti, M., 56
Grmek, R., 5
Grządziel, L., 214
Guan, H., 144

Hance, R.L., 73
Hashimoto, K., 140
Hau Tseng, M., 124
Hayashi, T., 152
He, D., 144
Huan, C.H.A., 255

Ichino, Y., 220
Igari, Y., 89
Ishidzuka, S., 89

Jiang, X., 144
Jimbo, T., 1
Jin, Y.M., 198
Jiujun, X., 159

Kaito, A., 220
Kato, K., 170
Kelber, J., 115
Kim, H.Joon., 110
Kim, J.Yong., 110
Kim, R., 183
Kim, S.Gil., 110
Kim, Y., 183
Kohzaki, M., 152
Koropecki, R.R., 267
Kreider, K.G., 32
Kusunoki, I., 89
Kwok, R.W.M., 131

Lacey, D., 225
LeClair, P., 9
Lee, C., 38
Lee, C.C., 164
Lee, S.E., 208
Lee, W.-J., 26
Lenzner, J., 82
Li, J.F., 179
Liang, W., 159
Lihui, G., 249
Lin, Y.-Z., 67
Logothetidis, S., 56
Lorenz, M., 82
Lu, S.-Y., 67

Magtoto, N., 115
Maiti, N., 16
Matsumuro, A., 152
Matz, W., 188
Mettlach, N.R., 73
Miki-Yoshida, M., 99
Miyake, Y., 170
Mominuzzaman, S., 1
Moodera, J.S., 9
Mozetič, M., 5
Mücklich, A., 188
Muramatsu, M., 152

Nakajima, A., 140

Oka, S., 232
Ong, C.W., 131
Oppermann, D., 82

Panjan, P., 5
Paraguay-Delgado, F., 99
Park, J.-W., 183
Patsalas, P., 56
Pejovnik, S., 5
Pham, M.T., 188
Platen, J., 47
Pranevicius, L., 56

Range, H., 89
Ray, A.K., 16
Reuther, H., 188
Richardson, T.H., 225
Richter, E., 188
Rongming, L., 249
Rubinelli, F.A., 267

Sakurai, H., 220
Salvadori, M.C., 264
Schmidt, J.A., 267
Selle, B., 47
Shin, S.-C., 38
Sieber, I., 47
Smith, K.C., 73
So, W.W., 164
Soga, T., 1
Sun, X., 144
Sun, Y.-M., 73
Swati, R., 241
Szuber, J., 214

Takada, N., 220
Takami, T., 89
Tanigaki, N., 220
Tapati, J., 241
Tokisue, H., 170
Topacli, A., 225
Tsyganov, I., 188

Umeharab, N., 170

PII: S0040-6090(00)01656-4

Umeno, M., 1

Wagner, G., 82
Watanabe, T., 140
Wee, A.T.S., 255
Wee, H., 38
Weng, G.J., 198
White, J.M., 73
Wieser, E., 188
Wong, H.Y., 131
Wong, K.W., 131
Wong, S.P., 131

Xiaolei, X., 159
Xu, J., 170

Yamaguchi, K., 152
Yang, J.-Y., 124
Yi, J., 208
Yokokawa, S., 220
Yoshida, M., 220

Zalar, A., 5
Zeimer, U., 47
Zhang, K., 255
Zhu, F., 255
Zukun, H., 159

ELSEVIER

Thin Solid Films 376 (2000) 277–281

thin solid films

www.elsevier.com/locate/tsf

Subject Index of Volume 376

μc-Si films
Studies on the formation of microcrystalline silicon with PECVD under low and high working pressure, 249
Acetone
Reaction of Si(111) surface with acetone, 89
Adsorption
Electronic properties of the space charge layer of in situ prepared copper phthalocyanine thin films exposed to oxygen, 214
AES
Effect of surface impurities on the Cu/Ta interface, 115
Alternating current plasma display panel
Improvement of secondary electron emission property of MgO protective layer for an alternating current plasma display panel by addition of TiO_2, 183
Aluminide coating
Manufacturing, structure and high temperature corrosion of palladium-modified aluminide coatings on nickel-base superalloy M38, 144
Aluminium
Phase formation in aluminium implanted titanium and the correlated modification of mechanical and corrosive properties, 188
Aluminum bronze coatings
Microstructures and properties of PVD aluminum bronze coatings, 159
Amorphous materials
Energy-resolved photon flux dependence of the steady state photoconductivity in hydrogenated amorphous silicon: implications for the constant photocurrent method, 267
Annealing
Dependence of microstructure and nanomechanical properties of amorphous carbon nitride thin films on vacuum annealing, 170
Atomic force microscopy (AFM)
Dependence of microstructure and nanomechanical properties of amorphous carbon nitride thin films on vacuum annealing, 170

Barrier metallization
An effective diffusion barrier metallization process on copper, 164

Carbon
Growth kinetics of sputtered amorphous carbon thin films: composition studies and phenomenological model, 56
Carbon nitride
Wear resistance of carbon nitride thin films formed by ion beam assisted deposition, 152
Cation ordering
CuAu-I type ordering and orientation domains in tetragonal $Zn2-2xCuxInxS_2$ films ($0.78 \leq x \leq 1$) crystallized on (001) gallium phosphide by pulsed laser deposition, 82
Chalcogenide
Influence of composition on the electrical and optical properties of $Ge_{20}Bi_xSe80-x$ films, 236
Chemical vapor deposition
Growth mechanisms of crystallites in the mixed-phase silicon films deposited by low-pressure chemical vapor deposition, 38
Low-temperature epitaxial growth of Si by electron cyclotron resonance chemical vapor deposition, 47
Pd–Ag alloy films prepared by metallorganic chemical vapor deposition, 67
Microcrystalline silicon phase in silicon oxide thin films developed by photo-CVD technique, 241
Chromium
An effective diffusion barrier metallization process on copper, 164
Coatings
Fractal character of circumferences of polishing-induced pull outs of plasma sprayed Cr_3C_2–NiCr coatings, 179
Condensation
Application of mathematical morphology in measurement of droplet size distribution in dropwise condensation, 16
Copper
Effect of surface impurities on the Cu/Ta interface, 115
An effective diffusion barrier metallization process on copper, 164
Corrosion
Titanium nitride thin films obtained by a modified physical vapor deposition process, 9
Phase formation in aluminium implanted titanium and the correlated modification of mechanical and corrosive properties, 188
Critical exponents
Critical exponents of diamond films: possible influence of spatially correlated noise, 264
Crystallinity
Studies on the formation of microcrystalline silicon with PECVD under low and high working pressure, 249
Crystallization
Growth mechanisms of crystallites in the mixed-phase silicon films deposited by low-pressure chemical vapor deposition, 38
Microcrystalline silicon phase in silicon oxide thin films developed by photo-CVD technique, 241

Deposition rate
Studies on the formation of microcrystalline silicon with PECVD under low and high working pressure, 249
Diamond films
Critical exponents of diamond films: possible influence of spatially correlated noise, 264
Diamond-like carbon
Camphoric carbon soot: a new target for deposition of diamond-like carbon films by pulsed laser ablation, 1

PII: S0040-6090(00)01657-6

Diffusion barrier
Effect of surface impurities on the Cu/Ta interface, 115

ECR PECVD
Water absorption characteristics of fluorinated silicon oxide films deposited by electron cyclotron resonance plasma enhanced chemical vapor deposition using SiH_4, SiF_4 and O_2, 26
Electrical conductivity
Influence of composition on the electrical and optical properties of $Ge_{20}Bi_xSe_{80-x}$ films, 236
Electron microscopy
CuAu-I type ordering and orientation domains in tetragonal $Zn_{2-2x}Cu_xIn_xS_2$ films ($0.78 \leq x \leq 1$) crystallized on (001) gallium phosphide by pulsed laser deposition, 82
Electrostatic spray pyrolysis
Deposition of MgO thin films by modified electrostatic spray pyrolysis method, 110
Ellipsometry
Growth kinetics of sputtered amorphous carbon thin films: composition studies and phenomenological model, 56
Epitaxy
Low-temperature epitaxial growth of Si by electron cyclotron resonance chemical vapor deposition, 47
Extraction electrode
Deposition of MgO thin films by modified electrostatic spray pyrolysis method, 110

Fourier transform infrared spectroscopy (FTIR)
Qualitative evaluation of pyroelectric mechanisms in Langmuir–Blodgett films containing a cyclic polysiloxane substituted with aliphatic side chains using Fourier transform infrared (FTIR) spectroscopy, 225
Fractals
Fractal character of circumferences of polishing-induced pull outs of plasma sprayed Cr_3C_2–NiCr coatings, 179
Fracture toughness
Fractal character of circumferences of polishing-induced pull outs of plasma sprayed Cr_3C_2–NiCr coatings, 179
Friction coefficient
Wear resistance of carbon nitride thin films formed by ion beam assisted deposition, 152
Friction-transfer method
Polarized electroluminescence from a uniaxially oriented polysilane thin film, 220
FTIR
Water absorption characteristics of fluorinated silicon oxide films deposited by electron cyclotron resonance plasma enhanced chemical vapor deposition using SiH_4, SiF_4 and O_2, 26

Gas-dielectric process
A novel process and thermodynamic mechanisms of air gap formation for ULSI application, 124
Growth mechanism
Low-temperature epitaxial growth of Si by electron cyclotron resonance chemical vapor deposition, 47
Growth kinetics of sputtered amorphous carbon thin films: composition studies and phenomenological model, 56
Guide
Deposition of MgO thin films by modified electrostatic spray pyrolysis method, 110

Hardness
Preparation of hard super-hydrophobic films with visible light transmission, 140
Dependence of microstructure and nanomechanical properties of amorphous carbon nitride thin films on vacuum annealing, 170
High-energy electron diffraction (RHEED)
Reaction of Si(111) surface with acetone, 89
Hot corrosion
Manufacturing, structure and high temperature corrosion of palladium-modified aluminide coatings on nickel-base superalloy M38, 144

Impurities
Effect of surface impurities on the Cu/Ta interface, 115
Indium
An effective diffusion barrier metallization process on copper, 164
Indium tin oxide
Indium tin oxide films prepared by radio frequency magnetron sputtering method at a low processing temperature, 255
Insulating substrates
Evaluation of precursors for chemical vapor deposition of ruthenium, 73
Intermetallic phases
Phase formation in aluminium implanted titanium and the correlated modification of mechanical and corrosive properties, 188
Ion beam assisted deposition
Wear resistance of carbon nitride thin films formed by ion beam assisted deposition, 152
Ion implantation
Phase formation in aluminium implanted titanium and the correlated modification of mechanical and corrosive properties, 188
Ion plating
Microstructures and properties of PVD aluminum bronze coatings, 159

Langmuir–Blodgett Films
PbBr-based layered perovskite film using the Langmuir–Blodgett technique, 232
Langmuir–Blodgett films (LB films)
Qualitative evaluation of pyroelectric mechanisms in Langmuir–Blodgett films containing a cyclic polysiloxane substituted with aliphatic side chains using Fourier transform infrared (FTIR) spectroscopy, 225
Layered perovskite
PbBr-based layered perovskite film using the Langmuir–Blodgett technique, 232
Low dielectric constant
Water absorption characteristics of fluorinated silicon oxide films deposited by electron cyclotron resonance plasma enhanced chemical vapor deposition using SiH_4, SiF_4 and O_2, 26
Low dielectric constant material
A novel process and thermodynamic mechanisms of air gap formation for ULSI application, 124
Low power
A novel process and thermodynamic mechanisms of air gap formation for ULSI application, 124

Magnesium oxide
Deposition of MgO thin films by modified electrostatic spray pyrolysis method, 110
Martensitic transformation
Micromechanics study of thermomechanical characteristics of polycrystal shape-memory alloy films, 198
Mathematical morphology
Application of mathematical morphology in measurement of droplet size distribution in dropwise condensation, 16
Metal-organic chemical vapor deposition
Evaluation of precursors for chemical vapor deposition of ruthenium, 73
MgO—TiO_2 film
Improvement of secondary electron emission property of MgO

protective layer for an alternating current plasma display panel by addition of TiO_2, 183
Micromechanics
Micromechanics study of thermomechanical characteristics of polycrystal shape-memory alloy films, 198
Mixed-phase
Growth mechanisms of crystallites in the mixed-phase silicon films deposited by low-pressure chemical vapor deposition, 38
Monolayers
Qualitative evaluation of pyroelectric mechanisms in Langmuir–Blodgett films containing a cyclic polysiloxane substituted with aliphatic side chains using Fourier transform infrared (FTIR) spectroscopy, 225

Nanostructures
Pd–Ag alloy films prepared by metallorganic chemical vapor deposition, 67
Nickel
An effective diffusion barrier metallization process on copper, 164

Optical coatings
Double-layer anti-reflection coating using MgF_2 and CeO_2 films on a crystalline silicon substrate, 208
Optical properties
Camphoric carbon soot: a new target for deposition of diamond-like carbon films by pulsed laser ablation, 1
Titanium nitride thin films obtained by a modified physical vapor deposition process, 9
Double-layer anti-reflection coating using MgF_2 and CeO_2 films on a crystalline silicon substrate, 208
Influence of composition on the electrical and optical properties of $Ge_{20}BixSe80-x$ films, 236
Energy-resolved photon flux dependence of the steady state photoconductivity in hydrogenated amorphous silicon: implications for the constant photocurrent method, 267
Organic semiconductors
Electronic properties of the space charge layer of in situ prepared copper phthalocyanine thin films exposed to oxygen, 214
Oxidation
Manufacturing, structure and high temperature corrosion of palladium-modified aluminide coatings on nickel-base superalloy M38, 144
Electronic properties of the space charge layer of in situ prepared copper phthalocyanine thin films exposed to oxygen, 214
Oxygen
A method of studying carbon particle distribution in paint films, 5

Paint
A method of studying carbon particle distribution in paint films, 5
Palladium
Pd–Ag alloy films prepared by metallorganic chemical vapor deposition, 67
Manufacturing, structure and high temperature corrosion of palladium-modified aluminide coatings on nickel-base superalloy M38, 144
Phase separation
Preparation of hard super-hydrophobic films with visible light transmission, 140
Photocurrent spectroscopy
Energy-resolved photon flux dependence of the steady state photoconductivity in hydrogenated amorphous silicon: implications for the constant photocurrent method, 267
Photoelectron spectroscopy
Electronic properties of the space charge layer of in situ prepared copper phthalocyanine thin films exposed to oxygen, 214
Physical vapor deposition
Titanium nitride thin films obtained by a modified physical vapor deposition process, 9
Plasma processing
A method of studying carbon particle distribution in paint films, 5
Plasma processing and deposition
Low-temperature epitaxial growth of Si by electron cyclotron resonance chemical vapor deposition, 47
Fractal character of circumferences of polishing-induced pull outs of plasma sprayed Cr_3C_2–NiCr coatings, 179
Studies on the formation of microcrystalline silicon with PECVD under low and high working pressure, 249
Polarized electroluminescence
Polarized electroluminescence from a uniaxially oriented polysilane thin film, 220
Polymer
A method of studying carbon particle distribution in paint films, 5
Polymers
Qualitative evaluation of pyroelectric mechanisms in Langmuir–Blodgett films containing a cyclic polysiloxane substituted with aliphatic side chains using Fourier transform infrared (FTIR) spectroscopy, 225
Polysilane
Polarized electroluminescence from a uniaxially oriented polysilane thin film, 220
Polysilicon
Growth mechanisms of crystallites in the mixed-phase silicon films deposited by low-pressure chemical vapor deposition, 38
Protective layer
Improvement of secondary electron emission property of MgO protective layer for an alternating current plasma display panel by addition of TiO_2, 183
Pulsed laser deposition
Camphoric carbon soot: a new target for deposition of diamond-like carbon films by pulsed laser ablation, 1

Raman scattering
Camphoric carbon soot: a new target for deposition of diamond-like carbon films by pulsed laser ablation, 1
Rapid thermal processing
High temperature materials for thin-film thermocouples on silicon wafers, 32
Reflection spectra
Double-layer anti-reflection coating using MgF_2 and CeO_2 films on a crystalline silicon substrate, 208
Rietveld method
Structure and morphology of high quality indium-doped ZnO films obtained by spray pyrolysis, 99
Ruthenium
Evaluation of precursors for chemical vapor deposition of ruthenium, 73
Rutherford back-scattering spectroscopy
Effects of ion beam bombardment on electrochromic tungsten oxide films studied by X-ray photoelectron spectroscopy and Rutherford back-scattering, 131

Secondary electron emission yield
Improvement of secondary electron emission property of MgO protective layer for an alternating current plasma display panel by addition of TiO_2, 183
Secondary ion mass spectroscopy (SIMS)
Indium tin oxide films prepared by radio frequency magnetron sputtering method at a low processing temperature, 255
Semiconductors
Indium tin oxide films prepared by radio frequency magnetron sputtering method at a low processing temperature, 255

Shape-memory alloy polycrystal films
Micromechanics study of thermomechanical characteristics of polycrystal shape-memory alloy films, 198
SiF_4
Water absorption characteristics of fluorinated silicon oxide films deposited by electron cyclotron resonance plasma enhanced chemical vapor deposition using SiH_4, SiF_4 and O_2, 26
SiH_4
Water absorption characteristics of fluorinated silicon oxide films deposited by electron cyclotron resonance plasma enhanced chemical vapor deposition using SiH_4, SiF_4 and O_2, 26
Silicon
Low-temperature epitaxial growth of Si by electron cyclotron resonance chemical vapor deposition, 47
Double-layer anti-reflection coating using MgF_2 and CeO_2 films on a crystalline silicon substrate, 208
Energy-resolved photon flux dependence of the steady state photoconductivity in hydrogenated amorphous silicon: implications for the constant photocurrent method, 267
Silicon carbide
Reaction of Si(111) surface with acetone, 89
Silicon oxide
Microcrystalline silicon phase in silicon oxide thin films developed by photo-CVD technique, 241
Silver
Pd–Ag alloy films prepared by metallorganic chemical vapor deposition, 67
SiOF
Water absorption characteristics of fluorinated silicon oxide films deposited by electron cyclotron resonance plasma enhanced chemical vapor deposition using SiH_4, SiF_4 and O_2, 26
Sol–gel method
Preparation of hard super-hydrophobic films with visible light transmission, 140
Soldering
An effective diffusion barrier metallization process on copper, 164
Solders
An effective diffusion barrier metallization process on copper, 164
Sputtering
Effects of ion beam bombardment on electrochromic tungsten oxide films studied by X-ray photoelectron spectroscopy and Rutherford back-scattering, 131
Indium tin oxide films prepared by radio frequency magnetron sputtering method at a low processing temperature, 255
Structural properties
Structure and morphology of high quality indium-doped ZnO films obtained by spray pyrolysis, 99
Dependence of microstructure and nanomechanical properties of amorphous carbon nitride thin films on vacuum annealing, 170
Microcrystalline silicon phase in silicon oxide thin films developed by photo-CVD technique, 241
Sulfides
CuAu-I type ordering and orientation domains in tetragonal $Zn_{2-2x}Cu_xIn_xS_2$ films ($0.78 \le x \le 1$) crystallized on (001) gallium phosphide by pulsed laser deposition, 82
Super-hydrophobic
Preparation of hard super-hydrophobic films with visible light transmission, 140
Superlattices
PbBr-based layered perovskite film using the Langmuir–Blodgett technique, 232
Surface morphology
Application of mathematical morphology in measurement of droplet size distribution in dropwise condensation, 16
Preparation of hard super-hydrophobic films with visible light transmission, 140
Surface roughness
Preparation of hard super-hydrophobic films with visible light transmission, 140
Surface structure
Preparation of hard super-hydrophobic films with visible light transmission, 140

Tantalum
Effect of surface impurities on the Cu/Ta interface, 115
TEM
Structure and morphology of high quality indium-doped ZnO films obtained by spray pyrolysis, 99
Thermomechanical characteristics
Micromechanics study of thermomechanical characteristics of poly crystal shape-memory alloy films, 198
Thin film
Evaluation of precursors for chemical vapor deposition of ruthenium, 73
Thin film thermocouples
High temperature materials for thin-film thermocouples on silicon wafers, 32
Thin films
CuAu-I type ordering and orientation domains in tetragonal $Zn_{2-2x}Cu_xIn_xS_2$ films ($0.78 \le x \le 1$) crystallized on (001) gallium phosphide by pulsed laser deposition, 82
Influence of composition on the electrical and optical properties of $Ge_{20}Bi_xSe_{80-x}$ films, 236
Titanium
Phase formation in aluminium implanted titanium and the correlated modification of mechanical and corrosive properties, 188
Titanium nitride
Titanium nitride thin films obtained by a modified physical vapor deposition process, 9
Wear resistance of carbon nitride thin films formed by ion beam assisted deposition, 152
Tungsten oxide
Effects of ion beam bombardment on electrochromic tungsten oxide films studied by X-ray photoelectron spectroscopy and Rutherford back-scattering, 131

ULSI
A novel process and thermodynamic mechanisms of air gap formation for ULSI application, 124
Uniaxial orientation
Polarized electroluminescence from a uniaxially oriented polysilane thin film, 220

Vacuum
Wear resistance of carbon nitride thin films formed by ion beam assisted deposition, 152

Wafer
High temperature materials for thin-film thermocouples on silicon wafers, 32
Watershed transformation
Application of mathematical morphology in measurement of droplet size distribution in dropwise condensation, 16
Wear
Phase formation in aluminium implanted titanium and the correlated modification of mechanical and corrosive properties, 188
Wear resistance
Wear resistance of carbon nitride thin films formed by ion beam assisted deposition, 152
Microstructures and properties of PVD aluminum bronze coatings, 159
Wetting
Effect of surface impurities on the Cu/Ta interface, 115

Preparation of hard super-hydrophobic films with visible light transmission, 140

X-Ray photoelectron spectroscopy
Evaluation of precursors for chemical vapor deposition of ruthenium, 73
X-Ray photoelectron spectroscopy (XPS)
Reaction of Si(111) surface with acetone, 89
Effects of ion beam bombardment on electrochromic tungsten oxide films studied by X-ray photoelectron spectroscopy and Rutherford back-scattering, 131
X-Ray total reflection analysis (XRTF)
Growth kinetics of sputtered amorphous carbon thin films: composition studies and phenomenological model, 56
X-TEM
Microstructures and properties of PVD aluminum bronze coatings, 159

Zinc oxide
Structure and morphology of high quality indium-doped ZnO films obtained by spray pyrolysis, 99